

Deer CCBY Doug Greenberg

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Wildlife Get Sick, Too

Wildlife and fish can get sick just like people. The health of Idaho's wildlife is important. Some diseases can be spread to people, farm animals and pets. By keeping an eye on the health of wildlife, Fish and Game is also keeping people and other animals healthy.

There are many people and two laboratories working to monitor and manage the health of our fish and wildlife. This is a tricky job. Obviously, animals cannot tell us how they feel or where it hurts. How do we know when wildlife might need help? Wildlife health experts use many tools to figure out what might be ailing an animal.

We can learn a lot just by watching animals. If an animal's head is hanging low, its ears are drooping and strings of saliva are hanging from its mouth, it is most likely sick. Animals may also act strangely when sick. They may lose their natural fear of people.

Animals often have the same health tests performed as people. Blood may be drawn and tissues sampled to look for diseases. Sometimes a necropsy (NEK-rôp-see) is performed. A necropsy is an animal autopsy (ô-top-see). It is used to determine how an animal died. First the outside of the animal is examined for abnormalities and identifying marks. The weight and gender of the animal are recorded. The animal is then cut open to see how the organs look. They are removed, weighed and sampled for examination. If an animal is found to have died from a contagious disease, Fish and Game knows to closely monitor other animals in that group.

While examining animals, people need to be careful. Some illnesses that animals get can be passed to humans. These diseases are called zoonoses (zō-ä-nə-sēs). People need to protect themselves by wearing masks and gloves.

You can learn more about wildlife health by visiting Fish and Game's website (**idfg.idaho.gov**). The webpage has specific information on animal diseases. You can also learn how to report a sick animal you see. Fish and Game is working hard to keep Idaho's wildlife healthy.



Being a Wildlife Veterinarian

By Dr. Nicole Walrath, BVMS

eing a veterinarian for Idaho's wildlife is fun and challenging. The role is different than your regular veterinarian. Instead of working with pets, I work with many wild animals. I don't just think about one animal that may be sick. I also need to think about how illnesses will affect an entire herd. The animals I work with are constantly on the move. They travel within Idaho but also cross borders into surrounding states.

Wild animals are difficult to find and hard to catch. A great team is required to help. I work at Idaho Fish and Game and they provide the help I need. Our team includes biologists and veterinarians from Idaho and other states and members of the public.

Biologists share what they see animals doing, including if they look unhealthy. Our wildlife health team helps by providing plans about how to watch for diseases. We also take biological samples. These samples might include blood, scat, hair, skin or snot. While that may sounds gross, the samples help us tell if animals are sick. They also tell us if diseases are getting better or worse.

In order to find diseases and take samples, we first have to catch the animals. Our team has to learn the best ways to safely catch and examine animals. I teach them how to dart, capture and restrain animals, so both the animals and those examining the animals are safe. If dead animals are found, I do necropsies to find out why they died. Sometimes I may perform surgeries on an injured animal. Surgeries may also be needed for special

tracking equipment to be used on an animal. These trackers help researchers see where and how an animal uses its habitat.

The information gathered is used to manage wildlife populations. It helps biologists understand how a disease might affect animals in their habitats. If disease is found, I let wildlife veterinarians and biologist in other states know about it. We work together to manage diseases across the Pacific Northwest. By working together and using teamwork, I can provide the best care to Idaho's wildlife.





Zombie deer disease sounds frightening. It can be; but maybe not for the reasons that pop into your mind. Zombie deer disease is another name for Chronic Wasting Disease or CWD. CWD was nicknamed zombie deer disease because it causes deer to behave strangely. Deer with CWD may be skinny, drool and droop their ears and heads. They may appear unaware of their surroundings and stumble around. It is the effect the disease has on deer that led to the name zombie deer disease.

CWD has not been found in Idaho, but it has been found in states that share our borders. The disease was first discovered in Colorado in 1967. As of July 19, 2021, it had spread to 26 other states. Wildlife managers are concerned about CWD and the effects it can have on our deer, elk and moose. It is easy for deer to catch and there is no cure. CWD is always fatal to members of the deer family, but people have not been found with the disease.

CWD belongs to a group of rare diseases. It's similar to Mad Cow Disease. These diseases are caused by folded proteins called "prions." When diseased prions contact normal prion proteins, they cause them to fold into an abnormal shape. It is hard for the body to break down folded prions, so they build up in the body in tissues like the brain. Deer act strangely because their brains are affected.

Deer catch CWD when they come into contact with saliva, urine, feces and carcasses of infected animals. Animals with the disease may not show any symptoms for up to two years. They look and act normal but can pass the disease on to others. After months pass, deer start to lose weight. They wander off from the herd. They lack coordination and begin to trip and fall.

Fish and Game is working to monitor and keep CWD out of Idaho. Fish and Game has a webpage dedicated to CWD. Here you will find more information and videos about CWD and everything we are doing to protect our deer, elk and moose from the disease. One thing we do is take samples from animals that are killed by cars, hunters and predators. If you harvest a deer, elk or moose and want to provide a sample, visit Fish and Game's website for more information. These samples will help us detect if CWD is in our state.

If you ever see a deer, elk or moose with any CWD symptoms, report it to Fish and Game on our wildlife health webpage. Try to get an accurate location with GPS coordinates, record the species and gender of the animal and take pictures. Don't touch, disturb, kill or remove the animal. This might spread the disease to other areas. Idahoans are fortunate to have so many animals in our great state! Let's keep them safe and healthy!



Juvenile elk with CWD, photo CCBY Beth and Tom WDA

Rabbit Hemorrhagic Disease



The word hemorrhagic (hem-or-RHAG-ik) means caused by or results in bleeding. The rabbit hemorrhagic disease (RHDV2) causes members of the rabbit family to bleed inside their bodies. People cannot get RHDV2.

This disease has not always been found in the United States. It was first discovered in 2010 in France. Since then it has been found in many countries. The first case in the United States was in 2018. In March 2021, the disease was discovered in Idaho in jackrabbits southwest of Boise.

RHDV2 is caused by a virus. It is very contagious and can affect pet rabbits and wild rabbits, hares and pikas. Sometimes, the only sign a rabbit is sick, is it suddenly dies and has blood around the nose. Rabbits may also have a fever, breathe heavily and not want to eat.

Rabbits can get the virus when they touch infected rabbits, urine, droppings or blood. They can also get it from surfaces like cages, food or water. People can spread the virus by carrying it on their clothing, shoes or hands.

Here are some things to do to help stop the spread of RHDV2.

- · Do not touch dead rabbits
- Do not release pet rabbits into the wild
- Do not allow pet rabbits to have contact with wild rabbits or pet rabbits from other places
- Wash your hands before and after touching pet rabbits
- Call your veterinarian if you think your rabbit is infected
- Report wild rabbits suspected of having the disease to Fish and Game or Idaho State Department of Agriculture

With everyone's help, we can slow the spread of this disease.



Halping

In the winter of 2021, bird watchers in the Pacific Northwest and Northern Rockies began to report seeing sick birds in their yards. Birds like pine siskins, house finches and American goldfinches were acting strangely. They did not fly away if someone came close. Many of the birds looked fluffed up and tired. Some of them had swollen eyelids. They looked like how you feel when you have a bad cold. What was happening?

As it turned out, these sick birds had a disease called salmonellosis (sal-mon-ell-O-sis). It is caused by a group of bacteria called salmonella. These bacteria were first discovered in 1885 by Dr. Daniel Salmon. Scientists have classified more than 2500 types of salmonella bacteria. Around 100 of these can also affect people.

People and animals get salmonellosis when they eat contaminated food. The bacteria finds a home in their intestines, making them sick. When they poop, out comes some of the bacteria. In the case of an animal, when the pool lands on the ground,

the bacteria can spread. If it spreads on something a bird eats, the bird can

get sick. Unfortunately most birds that get salmonellosis die.

Salmonella is always around, so why was it such a problem for birds this past winter?
Scientists are not sure. They think it could have something to do with how some bird species migrate. Pine siskins and other finches sometimes migrate in unusually large numbers. This is called an irruption. It is caused by a lack of food where the birds



usually spend the winter. As the finches migrate, they visit bird feeders. If a sick bird or two shows up, the disease can spread quickly.

If you see sick birds at your feeders, take the feeders down for several weeks. This helps prevent the spread of the disease. With no feeders, the birds will not gather in large numbers. Cleaning and sanitizing your bird feeders is also very important. Use hot soapy water and rinse the feeders well before thoroughly drying them in the sun. You can also soak feeders in hot water with a little bit of bleach. Use a ratio of ten parts water to one part bleach. While your feeders are soaking, rake up any spilled seed and seed hulls from under the feeders. Be sure to wear gloves and thoroughly wash your hands when you finish cleaning and raking. If you find a sick or dead bird, tell an adult and do not touch it.

Feeding the birds is a wonderful way to learn about your feathered neighbors. Keeping feeders clean and spilled seed raked up will help wild birds stay healthy during their winter visit.

RABIES

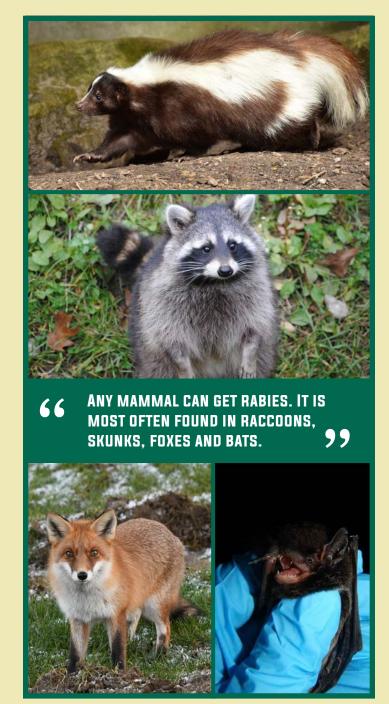
ave you heard of an animal disease called rabies? It has a scary reputation and for good reason. Rabies is only found in mammals and is always fatal. It also can be passed from an infected animal to a person.

Rabies is spread through an infected animal's saliva. Animals with rabies are more likely to bite, because they become agitated and aggressive. Bites are the main way that animals and people become infected. Rabies affects the nervous system and brain. Animals often become uncoordinated and are unable to walk normally. They might snap at the air and drool. Sometimes their muscles spasm. Wild animals often lose their fear of people. In the end stages, animals become paralyzed and die.

Any mammal can get rabies. It is most often found in raccoons, skunks, foxes and bats. Each of these animals have their own specific type of rabies. This is called a variant. The variant adapts to its host animal and spreads within that group. Scientists refer to these variants as reservoirs. Reservoirs are unique to each state. Some states may have all four types; others maybe one or two. In Idaho, bats are the only known natural reservoir of rabies.

People learn bats have rabies by testing them. When someone finds a sick bat, it is tested by the Idaho Department of Health and Welfare. For the past 10 years, an average of 15 rabid bats have been found in Idaho each year. This is about nine percent of all the bats tested. If your class has 30 students, nine percent would be about three students. That is not very many bats out of all the bats that live in Idaho. That's good for bats and people!

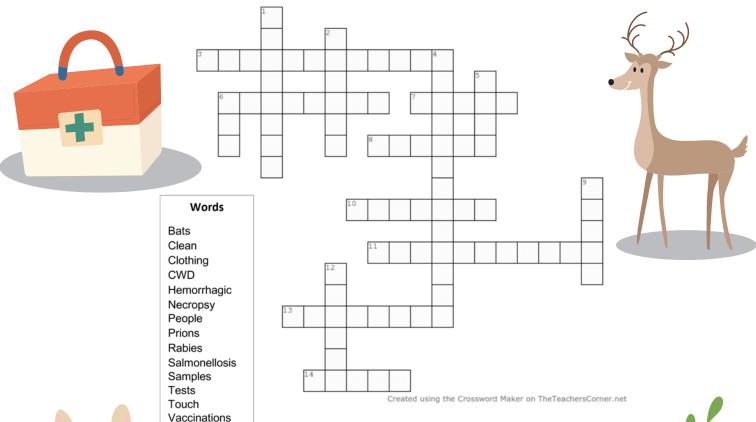
How can we protect ourselves from rabies?
Fortunately, our dogs and cats get rabies
vaccinations that protect them. By vaccinating
pets, people are protected, too. Vaccinated pets
wouldn't get rabies and then give it to their
owners. Because of vaccinations, the United States
was declared free of the dog rabies variant in
2007. Vaccinations also help people who work



with animals. Veterinarians, wildlife biologists and zookeepers all get rabies shots to protect them as they work.

An important way to stay safe is to never pick up or touch any wild animal that looks sick, especially mammals! Leave the animal alone and get help from an adult. They can contact Fish and Game or law enforcement. Another safety tip is to see a doctor right away if you wake up and find a bat in your bedroom. Bats have tiny teeth and their bite can be hard to see. Just to be sure, your doctor might give you shots for rabies. This will protect you if the bat was rabid. In the case of rabies, it is always best to be safe.

Wildlife Health and Diseases





<u>Across</u>

Zoonoses

- **3.** These can protect animals and people from diseases.
- **6.** People may spread RHDV2 by carrying it on their
- 7. Keeping bird feeders ____ will help stop diseases from spreading.
- 8. Folded proteins
- **10.** Tissue _____ help people look for diseases.
- 11. Means caused by or results in bleeding.
- 13. Diseases that can spread to humans.
- **14.** Animals often have the same health performed as people.

<u>Down</u>

- 1. This is an animal autopsy.
- 2. Any mammal can get this disease.
- **4.** People and animals can get this by eating contaminated food.
- **5.** The only known natural reservoir of rabies in Idaho.
- 6. This affects members of the deer family.
- It is important not to _____ a dead or dying animal.
- Animals may lose their fear of if sick.



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Editor: Adare Evans

Lead Writer: Adare Evans **Layout:** Glenna Gomez

Contributors: Adare Evans, Lori Adams, Vicky Runnoe, and Dr. Nicole Walrath, BVMS



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WE WOULD LIKE TO HEAR FROM YOU! If you have a letter, poem or question for Wildlife Express, it may be included in a future issue! Send it to: adare.evans@idfg.idaho.gov

Wildlife Express, Idaho Fish and Game PO Box 25, Boise, ID 83707